

THE

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Original Articles.

VENESECTION IN APOPLEXY.

By DR. E. J. FRASER, SAN FRANCISCO.

In this article apoplexy is limited to its original and literal meaning, to wit: a sudden loss of consciousness as from a blow upon the head and its congestion and subsequent hæmorrhage within the cranial cavity. The modern misnomers, pulmonary, renal and retinal apoplexy, and the like, where blood gradually oozes into a cavity or organ, are not considered.

As blood clots are always found in post mortem subjects, the theory has found favor that the coma was caused by the pressure of clots upon the brain. It is quite evident, however, that a violent congestion of blood to the brain often produces coma and that the hæmorrhage succeeds rather than precedes it. It is a fact that recoveries from apoplexy often follow without paralysis. If there was effusion of blood within the cranium, paralysis would necessarily follow from the pressure of clots upon the brain.

Apoplexy is liable to attack two classes of subjects, to wit:

First. Those of full habit with short necks and florid complexions. They generally have strong appetites and enjoy hearty food and plenty of it. They are generally looked

upon as unusually healthy subjects. Intemperance in eating or drinking is liable to bring on an attack. The subject becomes suddenly unconscious, the face turns purple, the veins of the neck and head become much distended, the pulse is strong, rapid, full and regular, the skin is hot and dry, the respiration is hurried but steady and regular without stertor, and there is a tendency to convulsive movements. In all such cases the coma is caused primarily by congestion, and the hæmorrhage is secondary.

Such subjects will invariably be benefited by venesection if the operation is performed early or before serious hæmorrhage has taken place. If active hæmorrhage has already commenced it is believed that venesection will arrest it and

should be resorted to without delay.

Second. Those of weak or enfeebled constitution who suffer from Bright's disease, hypertrophy of the heart by dilatation, aneurism, thrombosis, embolism, pyæmia or anæmia. In those cases a very profuse intercranial hæmorrhage may and generally does occur at the outset, and a clot is quickly formed. In such cases venesections would not be advisable.

In determining whether venesection is proper or not in subjects whose pathological condition is not known, the following rules may be safely observed, to wit:

If the face is very red, the veins greatly distended, the pulse is strong, rapid, full and regular, the skin hot and dry, the respiration rapid, steady and regular without stertor, and there is a tendency to convulsive movements of the muscles, then bleeding will be by all means advisable. If on the contrary the pulse is feeble and irregular, the skin cool or moist, the respiration slow and stertorous, and the patient is limp and motionless, the strong probabilities are that a severe hæmorrhage has already taken place within the cranial cavity. In all such cases bleeding is not advisable.

In order to show the propriety of venesection in the first class I will relate two typical cases.

Four years ago last April I was called to see a gentleman about thirty-five years old, who weighed about 225 lbs. His short, thick neck, florid complexion and full habit showed

that he was predisposed to such an attack. I found him insensible, with purple face and labored breathing, the pulse rapid, strong, regular and full, and he was rolling convulsively in bed. He could not be roused to consciousness. Seeing that no time was to be lost, I immediately bled him in the arm. When about a pint and a half of blood had escaped, his face became pale, he opened his eyes, and consciousness was restored. Under careful medical treatment he was able to go about his business in about two weeks without any symptoms of paralysis. He has not had an attack since that time and is at present alive and well.

Another case: Last August a gentlemen about 55 years of age and of an apoplectic build, came to this city from Los Angeles and stopped at the Russ House. He retired at night in his usual health, but nothing was seen of him the next morning. About 3 P. M. his door was forced open and he was found in a half conscious state with the frontal and temporal veins greatly distended. His tongue was badly swollen having been bitten through. He had evidently had an attack of apoplexy during the night. His eyes were congested and he saw everything double. I gave him the best treatment to my knowledge for a period of 24 hours, but he gradually grew worse. The pains in his head were almost intolerable. Seeing no prospect of relief from medicines, I drew about a pint of blood from his arm when his head ceased to ache, his vision was restored to its normal condition and has so continued. He is now actively engaged in business in Los Angeles.

The successful termination of the above cases I am satisfied was due to the bleeding. After the pressure was relieved medicines had an opportunity to act and did act very satisfactorily.

I am aware that since bleeding went out of fashion many able physicians discountenance it altogether, and do not practice it under any circumstances whatever. To my mind it seems to be wrong to let a patient die or else become permanently paralyzed when relief is provided by such a simple and easy operation.

ELECTRICAL REACTIONS IN PARALYSIS.

BY GEO. H. MARTIN, M. D., SAN FRANCISCO.

In the treatment of nervous diseases, there is no condition which calls forth our sympathy so much as to see a patient slowly but surely drifting into a condition of helplessness. Sometimes, if taken early enough, this may be checked, and the patient restored to usefulness; but unfortunately the larger number do not recover. Electricity sometimes helps us decide this point, and I will note a few facts that should be known of its action in these conditions. A nerve may be acted upon by the galvanic and faradaic currents, produducing a contraction of those muscles which it supplies, if it is a motor nerve, and sensation in the parts to which it is distributed, if it is sensory. A muscle may also be excited by either current, but it has within it, two excitable structures; the so called "nerve plates," or terminal motor nerve filaments, and the muscular fibre itself. The faradaic current acts more readily upon nerve filaments, while the galvanic acts upon the protoplasm of the musclar fibre. This is probably due to the fact that the muscular fibres are incapable of responding to a stimulus so short in duration as the rapid vibrations of which the faradaic current consists. explains the fact that in some forms of paralysis the irritability produced by the galvanic current, will remain longer than that produced by the faradaic, as the intramuscular nerves are apt to be affected from the beginning, while the muscular fibres are not involved until later. Contraction are produced by the galvanic current, only when the circuit is closed or opened, as currents strong enough to produce a tonic condition of the muscles could not be borne.

If the trophic centre of a nerve is destroyed, or its function impaired, or the nerve itself is seriously injured, we have what Erb has termed, "Reactions of Degeneration," that is, faradaic irritability lost, voltaic irritability increased, and changed in quality. With nerve degeneration there is a change in the nutrition of the muscular fibres, so that the power of response to faradaism is lost, while that to galvanism not only remains, but responds more quickly than in health. There is developed what the older pathologists

have called, an "irritable weakness." When the motor nerve cells undergo changes in nutrition, the irritability of the fibres and intramuscular nerves slowly decreases, until finally there is no response to either faradaism or galvanism, so there is no condition in which faradaic irritability is lost, and galvanic irritability increased, as there is when we have degeneration of the nerves themselves.

Paralysis is only a symptom; but it is a symptom of so serious moment, that when it is brought to our notice, every means should be used to discover its cause, and remove it if possible. Until within a comparatively short time, many forms of paralysis that are now considered curable were thought to be incurable and nothing done for them, because the lesion causing the trouble was not understood. But since electricity has been so much used as a diagnostic agent, the whole method of treatment has been revolutionized, and many cases have been helped or permanently relieved which otherwise would have gone from bad to worse, entailing upon its victim, that worst of all conditions, utter help-lessness.

If a muscle be paralyzed, the lesion must be situated in the nerve supplying it, or in the trophic centre of that nerve, in the spinal cord, or brain. Let us now consider the diseases in which paralysis is a symptom and their electrical First, diseases of the nerves. The only phenomena. means that we have of ascertaining the degeneration and changes that are taking place in a nerve during life, is by the electrical tests, so its importance in these conditions is great. In neuritis there is a gradual diminution of irritability to both currents, for about a week, when galvanic irritability increases for some months, then, if the inflammation continues in severity, even that begins to die away, until, finally, all excitability is lost, and then we know total nerve destruction has taken place. If, however, the inflammatory process is checked, galvanic irritability is reduced to normal, and gradually faradaic irritability is restored. Sometimes the power of conducting voluntary stimulus may return before the faradaic irritability. moment we get response to faradaism in these cases, then we know improvement has commenced. In traumatic conditions, in which the nerve has been divided, there will be no response to either current. In multiple neuritis, as one nerve after another becomes affected, we have degenerative reactions. In lead paralysis, there is loss of faradaic irritability, and increased galvanic, in the nerves affected.

In spinal cord diseases we have reactions of degeneration in diffuse myelitis, affecting the trophic centers of the spinal nerves, and in poliomyelitis anterior. In myelitis diffusa we are able to decide with our current whether nutritive changes are taking place in different segments of the cord or not, and if degenerative changes have taken place we can watch their progress, and so be able to decide about the prognosis. In infantile spinal paralysis, the paralysis usually comes on suddenly, and in a few days degenerative reactions are marked. If after awhile there is faradaic irritability ever so slight, we know that the case will recover. Many severe cases of talipes might have been prevented if attention had been paid to these reactions. In spastic paraplegia, the electrical reactions of the affected muscles are but slightly decreased, while those of the nerves may be diminished to both faradaic and galvanic currents. In pseudo-hypertrophic paralysis, the electrical reactions of the muscles are diminished to faradaism.

In progressive muscular atrophy the reactions are normal to both currents, as long as there is a muscular fiber remaining.

In the various forms of paralysis produced by cerebral diseases there is rarely any change in irritability of the muscles. The reactions are usually the same as those on the unaffected side, and are the same to both faradaism and galvanism. Of course, whenever the trophic centers of the cranial nerves are affected, we have the same reactions of degeneration that we would have when those of the spinal nerves are diseased. While I have simply mentioned the different conditions of which paralysis is a symptom, I think that these few points are enough to show the value of electrodiagnosis.

Very little could be done in neurology without this aid. By its use we are able to determine upon a course of treatment in these conditions, and how long to continue that treatment. We are also able, in most cases, to decide as to

the prognosis. While electricity is of great value to the neurologist, it is of just as much, and in some cases I might say more, to the general practitioner, for it is into his hands that the patient first falls, and it is not until he has tried all of his methods of cure that the specialist is consulted. In the meanwhile valuable time has been lost, which, if the physician had known how to improve, would have made a vast difference in the final result of the disease. It is the extinguishing of a small fire that prevents a conflagration. the treatment of a disease in its incipiency that determines the prognosis, and it depends more upon the physician who is first called to a case, to carry that case through to a final recovery, than upon all of the consultants or specialists who are called in afterwards. On these conditions of paralysis, where there is so much at stake, the physician should be able to decide at once what should be done, and treat the case accordingly, but he cannot do this satisfactorily unless he understands electric diagnosis.

Ophthalmology and Otology.

CONDUCTED BY H. C. FRENCH, M. D.

An Alleged New Method of Absorbing Cataract.

The Medical Record of March, 1890, has an article on the above subject by Richard Kalish, M. D. His plan is as follows: Two drops of a mixture of equal parts of glycerine with a one per cent solution of carbolic acid in rose water (prepared in rose water?) are instilled into the eye. The patient is seated in a high-backed chair, with his head thrown backward upon the chair. The operator stands or sits behind the patient and places both hands over the closed eyes, so that the tip of each middle finger rests upon an eyeball at its nasal side, the index and ring fingers falling into place beside the middle ones. Then with slight pressure upon the balls, these three fingers of each hand are drawn outward over each eye to the temporal side. The operation is

repeated twenty or thirty times a minute, the stroke being in one direction only, and continued for ten minutes, when a second instillation is made as before, followed again by ten minutes' manipulation, and the process repeated for the third time. This treatment is continued daily for a week, after which the interval between the instillations is lengthened to fifteen minutes, and repeated the same number of times. The eyes are then to be treated every other day for three or four months. In most cases Dr. Kalish noted increased tension, in each of which it was reduced by the treatment, hence he reasonably puts the question whether it would not be expected that incipient glaucoma might be benefited by this process. If there is any merit in hard work and persistency, this method of treatment certainly ought to succeed.

Color Perception.

We are in receipt of a carefully prepared brochure of some 24 pages, by Dr. V. Wurdemann of Milwaukee, Wis., in which the various theories of the more advanced writers upon the philosophy of color perception are logically and impartially discussed. It would be gratifying if our space permitted to enter largely into the merrits of this little work, but a brief quotation must suffice. The author says that "there are certain conditions in which the vibrations fail to excite the cerebral molecules in a full degree. We frequently find individuals who are unable to differentiate the finer shades of the same color. This is called a 'diminished chromatic sense.' Holmgren was unable to make any distinct lines of demarkation between this and what he called 'color blind-It is utterly impossible to account satisfactorily for ness.' such phenomena on any other basis than that of defective judgment. We therefore look upon 'color-blindness' as an exaggerated condition of diminished chromatic sense. Observers are agreed that the name color-blindness is a misnomer, and that very few cases are really blind to color. It is absurd to believe that because shades of red and green cannot be differentiated, that the person is really blind to either (i. e., that the patient cannot see them at all). He does see them, and sees them as colors just the same as he sees yellow or blue, but cannot separate the impressions made by the one from those made by the other. We would designate all these cases under the specific heading dyschromatopsia, meaning difficult color vision, to take the place of achromatopsia, which signifies no color vision."

Colleges and Hospitals.

Ladies' Hahnemann Hospital Association.

There has just been published in a neat and attractive dress the constitution and list of officers and members of the Ladies' Hahnemann Hospital Association. The good work done during the three years' existence of this energetic body of prominent ladies of San Francisco is now commencing to bear fruit, and any one who will carefully peruse this pamphlet cannot fail to become impressed with the fact that San Francisco will soon have a homeopathic hospital of which she may well be proud.

Two fifty vara lots have been purchased in a most desirable location at the intersection of Sixth avenue and Lake street, desirable not only on account of its beautiful situation, but also of its healthful surroundings, and we are in hopes soon to announce that the work of actual construction has begun. The building is to be substantial, handsomely furnished, thoroughly equipped with modern hospital accessories, will be devoted to homœopathy exclusively and under the medical supervision of homœopathic physicians. A special feature of this institution is to be a free ward for the treatment of sick and destitute children.

San Francisco, without extremes of heat or cold, with a climate in which out of door life is possible during the greater part of the year, should have very few sick children outside of the poor and destitute, and it is to meet the wants of this latter class that this free ward is to be established, and certainly there could be a no more commendable purpose.

The Ladies' Hahnemann Hospital Association have done and are doing everything in their power to hasten the realization of the aim towards which they are striving, and it is the bounden duty of every homeopathic physician of this city to use his utmost endeavors to aid this association. There are forty or fifty homeopathic physicians in San Francisco, and if each of these physicians would prevail upon two or three of his patients to become members of this association, its membership could be doubled during the year 1891. There are at present ninety-two annual and five life members, and it remains with the physicians of this city to say whether there shall not be two hundred annual members on the first day of January, 1892. Let us see what we can do for the Ladies' Hahnemann Hospital Association in the year 1891.

Copies of the Constitution will be furnished upon application to the President, Mrs. E. E. Caswell, No. 28 Post street, or to the Secretary, Mrs. J. R. Jarboe, No. 917 Pine street.

INTERNATIONAL HOMŒOPATHIC CONGRESS.

The organization and executive management of the Fourth Quinquennial International Homœopathic Congress has been placed in charge of a committee consisting of the executive committee and eight other members of the American Institute of Homœopathy.

The time appointed for the Congress to meet is June, 1891; and the place selected is Atlantic City, N. J.

In carrying out the duties placed on them, the committee desire to make such arrangements as will be most acceptable to those who will participate in this Congress, and will best serve the interests of homœopathy, and contribute to the progress of medical science throughout the world. They hope that every physician will give to it his most active efforts and strongest influence; and that our ablest men will contribute their best thoughts, either in written essays or in personal discussion on the topics selected. The time of this session will be necessarily so limited that many important

subjects cannot be properly considered; yet the committee desire to select those which will prove to be of the greatest service to the profession, and to have them presented by those most competent to the task; to this end they ask suggestions from those interested.

The usual five days session of the American Institute of Homceopathy will give place to this Congress. The institute will assemble, however, on the day preceding the Congress for the transaction of necessary business. The plan now proposed is that the Institute shall hold its session on Tuesday, June 16th, 1891; the Congress will assemble Wednesday, June 17th, and continue one week, namely, Wednesday, Thursday, Friday, Saturday morning (with rest Saturday afternoon, and Sunday), Monday and Tuesday, closing on Tuesday, June 23rd.

The Congress will accept as members all homoeopathic physicians in good standing in recognized Homoeopathic Medical Societies; and from places where such societies do not exist, physicians with suitable credentials. Delegates will be received from any and all Homoeopathic Institutions, and will be expected to prepare reports of them. Visitors will be admitted, whether physicians or laymen, who may be interested in the subject of homoeopathy.

The officers of the Congress will include representatives from all the important Homœopathic Medical societies; and the committee request that the names of the president and recording secretary of such societies be forwarded to them before May 1st, 1891.

The Congress will secure statistics of the present status of homeopathy and its progress in the last five years, as far as possible from all parts of the world. This will include the number of its practitioners, its institutions, national societies, state societies, local societies and clubs, general hospitals, special hospitals, infirmaries and dispensaries, colleges and medical schools, training schools for nurses, and medical journals. Their scope, organization, government, how to be conducted, methods of support, form of reports, and various matters of importance to each kind of institution, will be carefully considered. Essays and discussions will be prepared on the materia medica, homeopathic therapeutics in

surgery, and in special forms of disease, such as insanity, disease of the nervous system, of women, of children, of the chest, throat, eye and ear, alimentary tract, kidneys, etc.

In arranging these many subjects to the best advantage, the committee ask your suggestions and assistance. All communications may be sent to the chairman, T. Y. Kinne, M. D., Paterson, N. J., or to the secretary, Pemberton Dudley, M.D.,

cor. Fifteen and Master streets, Philadelphia.

By order of the Joint Committee the Chairman and Secretary are under instructions to make up and submit to the other members of the committee, a list of subjects, and of writers and debaters, to be appointed, at as early a day as possible; this duty will be performed, and in due time, thereafter, another circular will be issued, embracing a programme for the Congress.

Joint Committee.—T. Y. Kinne, M. D., Chairman; Pemberton Dudley, M. D., Secretary; E. M. Kellogg, M. D., Treasurer; R. Ludlum, M. D.; J. H. McClelland, M. D.; T. M. Strong, M. D.; I. T. Talbot, M. D.; J. W. Dowling, M. D.; J. P. Dake, M. D.; B. W. James, M. D.; O. S. Runnels, M. D.; T. G. Comstock, M. D.; F. H. Orme, M. D.

Editorial Notes.

The California Homeopath extends a hearty greeting to its friends and wishes them and all the homeopaths of America a very Happy New Year. The growth of Homeopathy throughout the world during the year just past has been phenomneal, and the outlook for our school has never been so flattering as at present. The colleges, societies and homeopathic physicians are doing a noble work in every quarter of the civilized world, and we, in California, can congratulate ourselves that we are well up near the head of the procession.

The Homeopath, representing as it does the Homeopathic sentiment of the Pacific Coast, asks, and has a right to

expect, the earnest co-operation of all physicians and patrons of our school, and we trust that our confidence in this respect will not be misplaced.

Standing, as we do, on the threshold of a New Year; at that joyous season when good resolutions are so generously made, we ask every homoeopathic physician in California and adjoining States to resolve immediately to subscribe for our journal, and to assist us in every way by the contribution of crisp, bright articles on any subject of general interest to the profession. Send along \$2.00, gentlemen, for one year's subscription to the only Homoeopathic Journal published on the Pacific Coast, and don't forget in the hurry of professional engagements, that anything you may meet in your daily experience that impresses you will possess an equal interest for your medical brethren.

In the December Homcopath I made the statement, editorially, that no Governor of California had ever had the courage or manhood to appoint a homœopathic physician on any of the State or municipal Boards of Health. In this an injustice was done to ex-Governor Perkins, who was the first and only chief magistrate of California to recognize the rights of our school in the selection of public officers. Upon the accession of Governor Perkins to the gubernatorial chair, he appointed a mixed State Board of Health; Dr. C. W. Breyfogle of San Jose being chosen to represent the Homœopaths, and the late Dr. Mason of Chico the Eclectic school of medicine. These gentlemen served during the term of the Board, and were most efficient members thereof, and no difficulty was ever experienced as a result of their appointment, the State Board of Health as thus constituted working together in perfect harmony. Governor Perkins set an example to his successors which unfortunately they have thus far completely ignored, and so through successive administrations the homoeopaths of California have been debarred from any participation in the control of public affairs, though regularly taxed to support men in office who have openly declared their hostility to our school, and who have persistently schemed to undermine our position in the

community. We have asked Governor Markham to act squarely with the homœopaths of California, and have every reason to believe that our cause is in the hands of a just man who will fulfill the ante-election assurances of his many friends.

C. L. TISDALE, M. D.

Correspondence.

EAST PORTLAND, Or., Dec., 15th, 1890.

Editors The California Homodopath:—On page 381 of your last journal we read, "ears; one ear, hot, red and itchy, accompanied by gastric derangements." Dr. Schussler asks, "well, now, why should only one ear be red and hot, and not both of them?" We will go down to the feet. When one takes off his boots at night, the ball of the right great toe invaribly itches. Well, now, why should only the ball of the right toe itch, and not that of the left? If the doctor will answer, we will also inform him the reason why one ear is red, hot and itchy, and not both of them, and further, we will give him the name of the remedies that will cure in either case.

GEO. WIGG, M. D.,

Homeopathic Medical Society of San Diego.

Editors California Homodopath—The annual meeting of the Homodopathic Medical Society of San Diego County was held in the office of Drs. Morgan & Polhemus on December 19th, 1890. There are ten members. During the past year eleven meetings have been held, six papers have been read, and five clinics have been given. No debts are outstanding. President B. F. Mertzman retired in rotation. The following officers were unanmously elected for the ensuing twelve months: President, Thomas Docking, M. D.; Vice President, W. P. Polhemus, M. D.; Treasurer, Miss S. Evaline Bailey, M. D.; the office of Secretary was left in the hands of the present incumbent pro tem., when the agreeable meeting adjourned.

T. DOCKING, Secretary.

Personals.

DR. GRANT, of Lodi, called while in the city recently.

WE understand DR. SANBORN, of Redding, has been in the city.

DR. F. X. GRANGER has removed from Santa Cruz to Laurel, Cal.

- DR. H. DAMKROEGER has removed his office to No. 315 Geary street. Telephone 2178.
- DR. J. A. OSTRANDER, of Merced, passed through the city recently on his way home.
- DIED.—DR. W. S. GEE, former Professor of Materia Medica in the Hahnemann Medical College of Chicago.
- DR. W. A. Dewey has taken a clinic at the Hahnemann Hospital College Dispensary upon Diseases of Children.
- DR. R. H. Curtis has removed his office and residence to 922 Sutter street, between Leavenworth and Hyde streets.
- DR. P. B. MORGAN has opened an office on Powell street, which he will run in conjunction with his San Rafael office.
- DR. W. E. Alumbaugh recently visited town. The doctor is making it lively for his old-school friends up in Vacaville.
- MR. E. W. Runyon, of the firm of Boericke & Runyon, is on a visit to Oregon and Washington and will call on the homoeopathic physicians in those states.
- DR. Low, of Paradise, has been on a visit to this city and to his old home near Santa Barbara for rest and recreation. He reports lots of malarial troubles in Paradise.

THE eighth annual announcement of the Hahnemann Hospital College is out, and extra copies may be had by addressing the Registrar or the editors of the Homogopath,

- DR. Schussler, says an exchange, lives at Oldenburg, a little old fashioned German town. He was once imprisoned for three months for prescribing for a patient out of his window at night, it being against German law to prescribe for a patient without seeing him.
- DR. C. L. TISDALE recently returned from Chicago, where he had been for several weeks taking courses on Orificial Surgery under Professor E. H. Pratt. The doctor is enthusiastic upon the subject, and since his return has performed several important orificial operations with most gratifying success.

THE Medical Board of Montana has recently been knocked out by a decision of the Court that a diploma from a reputable institution was better evidence of qualification than an examination from the board. It seems that the board was allopathic and tried to examine some homoeopaths who wouldn't be examined.

DR. E. N. Lowry has returned from his hurried visit East and resumed practice.

DR. C. S. SARGENT took a much needed but very short vacation, and spent a few days in San Francisco. The Doctor is one of the busiest men, and his practice has increased so rapidly that he had to get the service of an assistant. Dr. West, a graduate of the Hahnemann Hospital College of San Francisco, now fills that position.

The December number of the Southern California Practitioner, which is by far the best allopathic journal in California, recommends in an editorial that the State furnish aid to the various medical Colleges based, for instance, on the number of students in attendance. An excellent idea; one which would be fair to all. The Practitioner, with liberality rarely seen in allopathic journals, even recommends that the homeopathic and eclectic colleges receive their share.

Book Reviews.

Tuberculosis or Pulmonary Consumption; Its Prophylaxis and Cure by Suralimentation of Liquid Food. By W. H. Burt, M. D. Chicago, Ill.: W. T. Keener. Price, \$2.50.

This book has a special interest for the physician, coming at a time when the principal topics of the medical world are the researches of Koch on the bacterial origin of tuberculosis and its cure by inoculation. As its title implies it is simply the treatment and prevention of consumption by suralimentation of liquid food, combined of course with the proper homeopathic remedies. As a theory, liquid suralimentation in the treatment of tuberculosis is a most plausible one, far more so than the proposed inoculation theory of Koch. In fact, the latter inclines suspiciously to the elixir of life fraud of Brown-Sequard. It is difficult for any one acquainted with the pathological appearances of tuberculosis to comprehend, even if the disease be of bacterial origin, which is by no means proved, how the killing of these bacteriæ is to cure or even arrest the disease. One might even believe that the dead bacteriæ would do more harm that the live ones.

Dr. Burt claims that bacteriæ are not the cause of disease but the effects—that "They are man's true scavengers and are found whenever there is disease, with inflammation, ulceration, or decomposition in any of its forms. Their food is decomposition, and were it not for these micro-organisms absorbing the poisonous ptomaines and gasses produced by disease, man would be destroyed from off the face of the earth." We commend this book to those who are looking for more light on the subject of consumption, and can assure them they will find it here. The work is gotten up in a neat style by a new Richmond in the homeopathic publishing field, Mr. W. T. Keener, of Chicago.

A Text Book of Materia Medica, Pharmacology and Special Therapeutics. By I. J. M. Goss, A. M., M. D., Marietta, Ga. Second edition, 1890, Chicago: W. T. Keener. Price, \$5.00.

This book represents the latest eclectic work on Materia Medica and Therapeutics, and judging from the number of drugs that it contains, it is a most complete one, and practitioners of any school will find much that is valuable between its covers. For a Homeopathic physician, however, the arrangement is not all that could be desired, for what does a homeopath care about sedatives, restoratives, catalytics, blenorrhetics, aromatics, demulcents, etc. Then again, to get at the action of a drug one has to constantly resort to the index; for instance, capsicum is described on page 61 as a stimulant, on page 383 as a stimulant diaphoretic, on page 463 as an aromatic, while on 493 its irritant properties are given. It seems to us that a much better way would have been to have the action of the drug described in one place and at once. However, probably, our friend Goss did not think of us while he was writing his excellent work, else he would have striven to suit us. The book is an attractive one, thanks to the publisher Mr. W. T. Keener.

The Ophthalmic and Otic Memoranda. By D. B. St. John Roosa, M. D., LL. D. Fourth revised edition. New York: William Wood & Co., 1891.

This edition has been greatly enlarged, and subjected to thorough revision throughout. It constitutes a most concise and reliable epitome of the subjects upon which it treats, and touches upon almost every point of practical interest in ophthalmology and otology. It was our constant companion during our special studies upon the eye and ear, and we hail it as an old friend with new demands upon our esteem. It is, however, disappointing to find no mention of skiascopy, and such a limited notice of the advancement that has been made towards the discovery and correction of muscular troubles of the eye. The arrangement of the work is admirable, and it will be found a most important aid in the acquisition of accurate and systematic knowledge of the eye and ear.

Transactions of the Connecticut Homœopathic Medical Society, 1889.

This is an interesting pamphlet and contains some very instructive reading, chief of which is Prof. Wm. Tod Helmuth's address on hysterectomy, and the able address of President Hoag. Our brethren of the nux moschata state evidently have not the nux vomica symptom of disinclination to work, and this neat pamphlet emphasizes this fact.

The Physicians' All-Requisite Account-Book. Philadelphia: F. A. Davis, 1890.

Probably no class of people lose more money through carelessly kept accounts and overlooked or neglected bills than the physician. Often detained at the bedside of the sick until late at night, or deprived of even a modicum of rest, it is with great difficulty that he spares the time or puts himself in condition to give the same care to his own financial interests that a merchant, a lawyer, or even a farmer devotes. It is plainly apparent that a

system of book-keeping and accounts that, without sacrificing accuracy, but, on the other hand, insuring it, at the same time relieving the keeping of a physician's books of half their complexity and two-thirds the labor, is a convenience which will be eagerly welcomed by thousands of overworked physicians. There is no exaggeration in stating that this Account-Book reduces the labor of keeping accounts more than one-half, and at the same time secures the greatest degree of accuracy.

A Clinical Study of Diseases of the Kidneys. By CLIFFORD MITCHELL, A. M., M. D. Chicago: W. T. Keener, 1890. Price \$3.00.

We have rarely seen a medical book that presented so attractive an appearance as this one, published by a house comparatively new among homeopathic publishing firms. It is without doubt the handsomest volume on our shelves, and we hope older publishers will follow in the footsteps of this Western firm. Professor Clifford needs no introduction as a writer in this branch of medical science; the present volume includes subjects with which he has made us familiar before, namely: chapters on the systematic chemical examination of urine, systematic microscopical examination of urinary sediments, systematic application of urinary analysis to diagnsois and prognosis. The relation of urinary analysis to diet is explained at considerable length. Particular attention has been paid to the modern treatment of Bright's Disease, with the emergencies and complications that may arise in its course. This is an eminently practical work and we take great pleasure in recommending it to our readers as a valuable addition to every library.

The Weekly Medical Review Pocket Reference Book and Visiting List.

A new candidate for professional favor in the line of Physicians' Visiting lists. It is perpetual in its arrangement, convenient in size, good paper and binding, price \$1.00, and is published by J. H. Chambers & Co., St. Louis. We like it.

The Medical Bulletin Visiting List or Physicians' Call Record.

This publication appears in a new edition and is arranged upon an original and convenient monthly and weekly plan for the daily recording of professional visits. The usual tables, dosages, etc., form a part of this publication. It is handsomely bound in flexible morocco and adapted to a large clientage. Published by F. A. Davis, Philadelphia.

Bacteriological Technology for Physicians. By Dr. C. J. Salomonson: translated from the Danish by Wm. Trelease. New York: William Wood & Co., 1890.

This is a treatise on the cultivation, propagation and examination of bacteriae. The work contains 162 pages. There are chapters on Sterilization, Bacteriological Analysis, Culture, Inoculation and the various apparatus employed. It is undoubtedly a useful book for those interested in the subject of bacteria. It is bound in Wood's neat style.

Officers and Proceedings of the Vermont Homoeopathic Medical Society, 1890-91.

An interesting little pamphlet showing the doings of our Vermont brethren during the past year.

Transactions of the Maine Homœopathic Medical Society, 1890.

A neat and interesting volume.

Clinical Items.

ACETIC ACID.—Urine increased and light colored. Sexual: Prepuce thickened, fissured, cannot be retracted, and itches fearfully; very weakening nightly emissions; semen passes with stool; sexual passion, but feeble erections. Clinical: Large quantities of pale urine, particularly if accompanied by intense thirst and dry, hot skin, is always an indication for this remedy. In diabetes, with intense, burning, constant thirst, great debility and emaciation, this is the remedy.

Thlaspi bursa pastoris, is an old and tried remedy for hæmorrhages, profuse menses and metorrhagia. Urine has a red sandy sediment. Strangury, dysuria of old persons, spasmodic retention; excess of uric acid in urine.

Ocimum is another remedy for uric acid diathesis. Renal colic with violent vomiting. Large deposits of red sand with pain in ureters.

Tabacum has cured obstinate constipation with frequent urging. Stools dark colored. Hæmorrhoids.

Zincum is the remedy for neuralgic headaches, from forehead to vertex and occiput, heavy feeling on top, scalp sore, photophobia, restlessmess worse, least quantity of alcoholic stimulants.

Rhus aromatica Diabetes, incontinence of urine, hæmaturia and catarrh of the bladder. Enlarged prostate.

Guaiaicum, if given early ir the strength of 1x or 2x, will rapidly cure tonsilitis; even sometimes abort it.—C. S. Pratt.

Selections.

SOME CURES WITH UNPROVED MEDICINES.

BY DR. DUDGEON.

Though our materia medica contains a large number of medicines the study of whose pathogenetic effects, more or less perfectly ascertained by systematic provings and accidental poisonings, enable us to treat with success most of the diseases which we meet with in daily practice, there are yet some diseases for which we often fail to find a satisfactory simile in our pathogenetic treasury. It is quite possible that among our proved medicines there are remedies for all cases, but as our provings have not and could not have been carried so far as to produce medical likenesses of many natural diseases, and as amid the crowd of trivial symptoms we are not always able to detect the characteristic symptoms which might give us a clue to the selection of the appropriate remedies for these diseases, we are glad to be guided to the cure in any other way. The usus in morbis, when the diseases are of a definite character, is often very useful where the hints of the pathogenesis are obscure, and is, in fact, our only source of information as to the remedial powers of some medicines which have never been proved. The homoeopathic therapeutic rule can only be acted on where the medicines have been proved—I should say, thoroughly proved—but in the absence of such provings the usus in morbis, or clinical experience, is our only guide. Still, I think that if an unproved or imperfectly proved medicine given in small doses cures a definite case of disease, we may reasonably infer that it cures by virtue of the natural law that underlies the homeopathic therapeutic rule, and, indeed, many medicines which were found remedial in certain diseases before Hahnemann have been shown by his and his disciples' provings to be homoeopathic to these diseases. while we maintain that similia similibus is the true and only scientific therapeutic rule, we admit that it cannot always be applied, owing to the imperfection of our materia

medica, and we thankfully avail ourselves of the usus in morbis, when this therapeutic rule is inapplicable, in the firm conviction that the cures we effect under the guidance of clinical experience alone will be found to come under the homeopathic rule when the materia medica is perfected by the thorough proving of all remedies. As that will not be the case for some time to come, without further preface I will relate a few cases where the selection of the remedies were not made in the ordinary homeopathic way, but where, in spite of that, I believe the treatment was essentially homeopathic.

SYZYGIUM JAMBOLUM IN DIABETES.

1. A lady, æt. about 70, whom I had occasionally treated for various affections, chiefly erysipelas and chronic eczema, the last time in 1883, came to me on the 26th of September, 1887, complaining of intense pruritus vulvæ, which for some days had tormented her day and night. She had also a boil on the back between scapulæ, which, after bursting, had continued to discharge for several weeks. A few spots of psoriasis were to be seen on the upper part of her body. For a few days she had felt a shooting pain in the left flank. She had noticed that for some time she was very weak, and was always thirsty, and passed a large quantity of urine. I examined the urine, and found its specific gravity as high as 1040, and that it contained a large quantity of sugar. I prescribed Pond's Extract externally for the pruritus, and phos. acid 1x four drops three times a day, and advised her to avoid sugar, bread, and potatoes.—October 11th. irritation continues, and she complained of prickling all over. The boil still continued to discharge, thirst and copious flow of urine continued, its specific gravity was 1037, and it contained much sugar; but she felt better and stronger. I had recently become acquainted with the remarkable cures of diabetes effected with syzygium in the practice of an Indian doctor, and therefore gave her some of the tincture of that substance which I had myself prepared from the seeds I had procured from India, and directed her to take two drops twice a day in alternation with the phos. acid.—November Specific gravity of urine, which is still passed in con-8th. siderable quantities, 1037. The thirst is less, and the pruritus greatly alleviated, but not gone. She has still much of the prickling like needles all over body. The boil continues to discharge. Continued medicine.—November 11th. thirst has increased, but she does not pass as much urine, though the specific gravity has again increased to 1040. Very little pruritus, but considerable leucorrhea. I now prescribed arsen. brom. 3x three times a day.—January 1st, 1888. Passes comparatively little urine; its specific gravity 1032, and the sugar in it considerably diminished. Much less thirst. Leucorrhea soon went off after commencing the last I again prescribed syzyg. and phos. acid. in altermedicine. nation.—February 2nd. Less thirst, much less irritation, less urine passed, specific gravity 1036. I now gave syzyg. tr. alone, two drops three times a day.—March 29th. Quantity of urine passed not more than normal, specific gravity 1033. Boil still discharging. No thirst, much less irritation. Continued syzyg. twice a day.—June 11th. Feels very well and strong, no thirst. Urine normal in quantity, specific gravity 1036. Irritation gone. I prescribed syzyg. and arsen. brom. on alternate days.—July 31st. Feels quite well, but urine still of high specific gravity-1036. The boil has healed up. No more pruritus nor prickling. Directed her to take syzyg. once a day.—I saw her occasionally after that, and she always said she was quite well, and had left off the medicine. In November she had again a little return of the pruritus, which was allayed by a few doses of caladium 3x. This is, of course, not altogether a satisfactory illustration of the power of syzygium over diabetes, but at that time I had not sufficient confidence in the new remedy to trust to it alone. Still there is no doubt it contributed to the cure in this case, though what was its precise share in the happy result cannot be determined. The next case is a better example of its antidiabetic power.

2. Dr. G—, æt. 56, came to me on the 5th of September of this year. He complained of what he called "prickly heat" all over the upper part of his body and arms. The skin was covered with small red papules, which he said itched so intensely he could get no rest. He felt very weak, which might be owing to his having for the last week ab-

stained from all animal food, and confined himself to bread, farinaceous food, vegetables, and fruit. He complained of much thirst and a great flow of urine. His mouth is very dry, and he must pass water every two hours day and night. The urine which I examined had a specific gravity of 1036, and was very saccharine. I told him to take chiefly animal food and green vegetables, and very little bread and no sugar. I gave him a phial of tincture syzyg. mixed with three times the quantity of alcohol, and directed him to take two drops every three hours.—September 17th. He had taken the specific gravity of his urine every day, and found that it sometimes reached 1045, but had steadily declined for the last few days. It was now 1030. His thirst was less, the prickling itching much relieved, and the quantity of urine passed very much diminished. Continued medicine.—29th. No thirst, no itching, passes very little urine-specific gravity 1025; he told me it had even been much lower. No. sugar. His strength and spirits excellent. I told him to continue the syzyg. once a day for a short time to confirm the cure.

This is the most striking cure of diabetes I have yet seen by any treatment. I cannot say with preciseness how long the disease had lasted before the patient visited me. It is always very difficult—generally impossible—to fix the date when the diabetes began. It is generally pretty far advanced before the patient thinks it necessary to seek advice. Dr. G --- was chiefly concerned about the tiresome pruritus, which deprived him of rest. He noticed that his mouth was dry and that his thirst was great, but he ascribed this to febrile irritation from the incessant torture of the Though not a medical doctor, he has a fair itching. knowledge of physic, and when I announced to him, after examination of the urine that he had diabetes, he was very much alarmed. The diet he had been pursuing was of course the worst possible for his disease, but he adopted it with the view of allaying the intolerable itching, on which, however, it had no effect-indeed, the itching grew worse every day, and was the cause of his coming to me. watched his symptoms with intelligence, and carefully tested the specific gravity of the urine from day to day. I was not very strict in my dietetic rules, only enjoined on him to eat as much meat as he felt inclined for, to abstain from sugar, and to take toast and biscuit in place of bread and potatoes. As the diabetic symptoms declined, I removed my embargo on sugar and starch, so that, in fact, diet had nothing to do with his cure, which was apparently solely due to the I had already had some experience of the Syzygium. power of this medicine in several cases of diabetes, but none to such a degree as in this case. This may have been owing to the other cases not having been of quite the same character as this one, or perhaps to my not having relied on it alone for the cure. Of course I know that Syzygium will not cure all cases of diabetes, for that is a disease that seems to be owing to many different morbid states; but my success in this case should be an encouragement to others to give it a fair trial in similar cases. The mere diminution in the quantity of sugar exerted by means of a rigorous anti-diabetic diet, cannot be considered as a cure for diabetes, for the sugar, as a rule, returns as soon as the patient resumes ordinary diet. By the way, the cures said to have been effected by Opium are illustrations of the homeopathic therapeutic rule, for Levenstein has shown in his work Die Morphiumsucht, that acute poisoning by morphia causes sugar to appear in the urine of man and animals.

When I first announced, now some several years ago, that I had made some encouraging trials of Syzygium in diabetes, Dr. Swan, of Philadelphia, asked me to send him some of the new medicine; which I did, and some time afterwards he wrote to tell me that he had successfully used it in his own case. He took it in a so-called "high attenuation" made by his own peculiar process, and he was extremely satisfied with the result. I have mislaid his letter, so am not now able to give the details of his case which he kindly communicated to me.

THLASPI BURSA PASTORIS FOR EXCESSIVE URIC ACID.

I have elsewhere mentioned the power of this substance to affect the secretion of uric acid,* and since then I have seen several cases corroborative of its medicinal virtues in

this direction. One, a gentleman, æt. 57, who, in addition to other dyspeptic symptoms, had occasionally large discharges of uric acid, coming away in masses the size of a good big pin's head, but curiously enough without pain. I prescribed Thlaspi, which he said soon stopped the uric acid. Nearly a year after this he called on me for a different affection, and informed me that the uric acid reappeared several times in his urine, but that a few doses of Thlaspi 1 soon stopped it, and it never came to the height it attained when I first gave it to him. A lady, near 80 years of age was suffering from pressure of the calculus in the left ureter, which I knew to be of uric acid, as she had previously passed much "sand." urine showed no sand, and was very scanty. I tried several remedies, among the rest the Boro-citrate of Magnesia but it was not till I gave Thlaspi 1 that a great discharge of coarse brick-colored sand took place, with speedy relief to her pain. At the same time, indeed, I made her drink copiously of distilled water, which has a powerfully disintegrating effect on uric acid sometimes, but as she had already been taking this for several days without effect, I am inclined to give the whole credit of the cure to Thlaspi.

It is not alone in such cases that Thlaspi is useful. Its ancient use as a hemostatic has been confirmed in modern times and in my own experience, and my friend Dr. Harper, related to me lately a most interesting cure he had effected by its means of a very prolonged and serious affection. The case was that of an elderly lady who for years had suffered from a large discharge of muco-pus, sometimes mixed with blood, sometimes apparently nearly all blood, which poured from the bowels after every evacuation. had been many months under the medical treatment of the late Dr. D. Wilson, who at last told her he considered her She then put herself under the treatdisease incurable. ment of a practitioner who relies chiefly on oxygen gas for his cures; but she was no better-rather worse-after his treatment. She then came to Dr. Harper, who worked away at her with all the ordinary remedies without doing any good. At last he bethought him of Thlaspi, led thereto by my remarks on its anti-hemorrhagic properties in my "Therapeutic Notes" in The Monthly Homoeopathic Review of October, 1888, and he found that from the time she commenced using this remedy the discharge from the bowels gradually declined and ultimately ceased, and there has been no return of it.

No doubt *Thlaspi* is a great remedy, and until it is satisfactorily proved we may employ it with advantage in cases similar to those I have mentioned. But it is to be hoped that some of our colleagues endowed with youth, health, and zeal, will ere long favor us with a good proving of it, whereby its curative powers may be precisionized. At present we only partially know these from the less satisfactory results of clinical experience.

CUNDURANGO IN CANCER.

Mrs. B.—, aet. 69, had been frequently under my care for various slight ailments in former years, but I had not seen or prescribed for her since 1875, as she had removed to a distant quarter of the metropolis, and had fallen into the hands of an allopathic practitioner. She came to me on the 16th of December, 1886, and told me that for several months past she had been under treatment for an affection of her left breast, which had rapidly grown worse, and her medical attendant, in consultation with an operating surgeon, had frightened her by telling her she had cancer of the breast, and that if she was not operated on for it within a fortnight it would inevitably kill her. I found the breast very tender to the touch all over, the nipple retracted so as to be invisible, a hard, painful swelling of the gland on the outer side of the nipple about the size of an egg; the skin on its centre drawn in, and frequent darts of lancinating pain proceeding in different directions from the tumour. Her health otherwise was not bad, but she was exceedingly nervous, and could get very little sleep at night owing to the darting pains. I prescribed Phytolacca 1 every six hours, and an ointment of Hydrastis tr. gtt. xx mixed with Vaseline 3j to be rubbed over the tumour twice a day. Phytolacca succeeded in allaying the general tenderness of the breast, she was to take Hydrastis 1 internally three times a day. She came again on the 29th of January, 1887. She had soon left off the Phytolacca, and had been taking the Hydrastis internally, and using the ointment as directed. The tumour had not decreased; on the contrary, it was rather larger, and the breast, where the ointment had been applied, was covered with an itching eruption, consisting of small blackish pustules on a red basis, which gave her much pain and discomfort. The shooting pains through the tumour were as bad as ever, and she felt weak and miserable. I now prescribed Croton Tig 2 three times a day, and discontinued the ointment. She again visited me on the 14th of March. The eruption had soon disappeared, but the tumour was larger and exceedingly painful and tender. I again prescribed Hydrastis 3x three times a day. I next saw her on the 26th of March. For several days she had been spitting blackish lumps of blood. The tumour was still larger, and the shooting pains darted from it to between the scapulæ. No swelling of axillary glands. I prescribed Conium 1 three times a day. I did not see her again until the 31st of May. The pain was now very much less, and the tumour seemed to be smaller; the skin over its centre was still depressed. Continued medicine. did not return till the 29 of September. The pain had increased, shooting through to the shoulders; the hard tumour was as big as before, and in the centre of the depression over it there appeared a red nodule of the size of a threepenny-bit, which was very tender. Prescribed Silica 3 three times a day. On the 11th of November, the tumour was less painful, seemed smaller, but the red nodule in the center of the depression was decidely bigger, and very tender. Continued medicine. On the 1st of February, 1888, I found the tumour very tender. The nodule had grown to the size of a walnut, is of a bright red color, and has a glazed appearance; looks as though it were about to burst. It is the seat of stabbing pains, as if a penknife were thrust into it. It is hard, tender, and evidently connected with the hard tumour in the mammary gland, of which, indeed, it seems to form a part. There is tenderness for some distance beyond the tumour, but the axillary glands are unaffected. Pulse quick and weak, great depression of spirits. I now prescribed Cundurango 1, two

drops three times a day. On the 12th of June, the mammary tumour is decidedly less, the pain and tenderness much diminished. The red lump is smaller, and has a crucial depression in the centre. Continued Cundurango. On the 6th of November, 1 found her much better, the original tumour much smaller, not tender or painful, and the red lump has entirely disappeared; where it had been there is now a deep depression in the skin, looking like a contracted cicatrix. Continued medicine. I saw her next on the 26 of July. Hardly a trace of the lump is to be felt. The cicatrix-like depression of the skin is still there, but there is no pain and no tenderness. In short, the disease is gone. She complained of flatulence in stomach and bowels, for which I prescribed Carbo Animalis 3. last visit was on the 11th of November. The place where the tumour was still presents the cicatrix-like depression, and there is a trace of hardness in the breast below it, but though she does not like the breast squeezed, it gives her no inconvenience. She had not come to see me on account of the breast, but because she was suffering from neuralgic pains in the neck and giddiness, for which I prescribed Phosphorus. I have called the disease "cancer," as it was pronounced to be that by her former medical attendants, and it presented all the characteristic signs of malignant disease. Until I gave Cundurango it continued to pursue the usual course of such affections, and on the first of February, 1888, it had such a threatening aspect that I feared it was about to become an open cancer, and I was hopeless of being able to arrest its progress. The steady amendment that took place as soon as the Cundurange was commenced, was extremely gratifying, and should encourage us to hope that other similar cases may also be benefited by this remedy. Cundurango is not an absolutely unproved medicine, but the meagre pathogenesis we have of it gives no hint as to its therapeutic power in malignant diseases, unless, perhaps, the tendency to the formation of large red pimples, like "incipient boils," and the action on congenital warts noticed in Dr. Burnett's proving, may be looked upon as hints for its use in cancerous tumous that seem to be tending towards ulceration as in the case just recorded.

PEROXIDE OF HYDROGEN AND OZONE. - THEIR. ANTISEPTIC PROPERTIES.

By DR. PAUL GIBIER, DIRECTOR OF THE PASTEUR INSTITUTE OF NEW YORK

Read before the International Medical Congress, held at Berlin, Germany, on the 7th of August, 1890. Published by Medical News of Philadelphia, Oct. 25th, 1890. Pp. 416—418.

Gentlemen:—Since the discovery of peroxide of hydrogen by Thenard, in 1818, the therapeutical applications of this oxygenated compound seem to have been neglected both by the medical and surgical professions; and it is only in the last twenty years that a few bacteriologists have demonstrated the germicidal potency of this chemical.

Among the most elaborate on the use of this compound may be mentioned those of Paul Bert and Ragnard, Baldy, Pean and Larrive.

Dr. Miguel places peroxide of hydrogen at the head of a long list of antiseptics, and close to the silver salts.

Dr. Bouchut has demonstrated the antiseptic action of peroxide of hydrogen when applied to diphtheritic exudations.

Prof. Nocart, of Alfort, attenuates the virulence of the symptomatic microbe of carbuncle, before he destroys it, by using the same antiseptic.

*Dr. E. R. Squibb, of Brooklyn, has also reported the satisfactory results which he obtained with peroxide of hydrogen in the treatment of infectious diseases.

Although the above-mentioned scientists have demonstrated by their experiments that peroxide of hydrogen is one of the most powerful destroyers of pathogenic microbes, its use in therapeutics has not been as extensive as it deserves to be.

In my opinion the reason for its not being in universal use is the difficulty of procuring it free from hurtful impurities. Another objection is the unstableness of the compound, which gives off nascent oxygen when brought in contact with organic substances.†

^{*} Gaillard's Medical Journal, March, 1889.

t The peroxide of hydrogen that I use is manufactured by Mr. Charles Marchand, of New York. This preparation is remarkable for its uniformity in strength, purity and stability.

Besides the foregoing objections the surgical instruments decompose the peroxide, hence, if an operation is to be performed, the surgeon uses some other antiseptic during the procedure, and is apt to continue the application of the same antiseptic in the subsequent dressings.

Nevertheless, the satisfactory results which I have obtained at the Pasteur Institute of New York with peroxide of hydrogen, in the treatment of wounds resulting from deep bites, and those which I have observed at the French clinic of New York, in the treatment of phagedenic chancres, varicose ulcers, parasitic diseases of the skin, and also in the treatment of other affections caused by germs, justify me in adding my statement as to the value of the drug.

But, it is not from a clinical standpoint that I now direct attention to the antiseptic value of peroxide of hydrogen. What I now wish is merely to give a full report of the experiments which I have made on the effects of peroxide of hydrogen upon cultures of the following species of pathogenic microbes: Bacillus anthracis, bacillus pyocyaneous, the bacilli of typhoid fever, of Asiatic cholera, and of yellow fever, streptococcus pyogenes, micro-bacillus prodigiosus, bacillus megaterium, and the bacillus of osteomyelitis.

The peroxide of hydrogen which I used was a 3.2% solution, yielding fifteen times its volume of oxygen; but this strength was reduced to about 1.5%, corresponding to about eight volumes of oxygen, by adding the fresh culture containing the microbe upon which I was experimenting. I have also experimented upon old cultures loaded with a large number of the spores of the bacillus anthracis. In all cases my experiments were made with a few cubic centimetres of culture in sterilized test-tubes, in order to obtain accurate results.

The destructive action of peroxide of hydrogen, even diluted in the above proportions, is almost instantaneous. After a contact of a few minutes, I have tried to cultivate the microbes which were submitted to the peroxide, but unsuccessfully, owing to the fact that the germs had been completely destroyed.

My next experiments were made on the hydrophobic virus in the following manner:

I mixed with sterilized water a small quantity of the me-

dulla taken from a rabbit that had died of hydrophobia, and to this mixture added a small quantity of peroxide of hydrogen. Abundant effervescence took place, and, as soon as it ceased, having previously trephined a rabbit, I injected a large dose of the mixture under the dura matter. Slight effervescence immediately took place and lasted a few moments, but the animal was not more disturbed than when an injection of the ordinary virus is given. This rabbit is still alive, two months after the inoculation.

A second rabbit was inoculated with the same hydrophobic virus which had not been submitted to the action of the peroxide, and this animal died at the expiration of the eleventh day with the symptoms of hydrophobia.

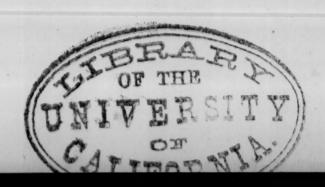
I am now experimenting in the same manner upon the bacillus tuberculosis, and if I am not deceived in my expectation, I will be able to impart to the profession some interesting results.

It is worthy of notice that water charged, under pressure, with fifteen times its volume of pure oxygen has not the antiseptic properties of peroxide of hydrogen. This is due to the fact that when the peroxide is decomposed, nascent oxygen separates in that most active and potent of its conditions next to the condition, or allotropic form, known as "Ozone." Therefore it is not illogical to conclude that ozone is the active element of peroxide of hydrogen.

Although peroxide of hydrogen decomposes rapidly in the presence of organic substances, I have observed that its decomposition is checked to some extent by the addition of a sufficient quantity of glycerin; such a mixture, however, cannot be kept for a long time, owing to the slow but constant formation of secondary products having irritating properities.

Before concluding I wish to call attention to a new oxygenated compound, or rather ozonized compound, which has been recently discovered and called "Glycozone" by Mr. Marchand.

This glycozone results from the reaction which takes place when glycerin is exposed to the action of ozone under pressure—one volume of glycerin with fifteen volumes of ozone produces glycozone.



By submitting the bacillus anthracis, pyocyaneous, prodigiosus, and megaterium to the action of glycozone, they were almost immediately destroyed.

I have observed that the action of glycozone upon the typhoid fever bacillus, and some other germs, is much slower

than the influence of peroixde of hydrogen.

In the dressing of wounds, ulcers, etc., the antiseptic influence of glycozone is rather slow if compared with that of peroxide of hydrogen, with which it may, however, be mixed at the time of using.

It has been demonstrated in Pasteur's laboratory that glycerin has no appreciable antiseptic influence upon the virus of hydrophobia; therefore I mixed the virus of hydrophobia with glycerin, and at the expiration of several weeks all the animals which I inoculated with this mixture died with the symptons of hydrophobia.

On the contrary, when glycerin has been combined with ozone to form glycozone, the compound destroys the hydro-

phobic virus almost instantaneously.

Two months ago, a rabit was inoculated with the hydrophobic virus, which had been submitted to the action of this new compound, and the animal is still alive.

I believe that the practioneer will meet with very satisfactory results with the use of peroxide of hydrogen for the following reasons:

- 1. This chemical seems to have no injurious effect upon animal cells.
- 2. It has a very energetic destructive action upon vegetable cells—microbes.
- 3. It has no toxic properties; five cubic centimetres injected beneath the skin of a guinea-pig do not produce any serious result, and it is also harmless when given by the mouth.

As an immediate conclusion resulting from my experiments, my opinion is, that peroxide of hydrogen should be used in the treatment of diseases caused by germs, if the microbian element is directly accessible; and it is particularly useful in the treatment of infectious diseases of the throat and mouth.